## LISTING OF THE CLAIMS

1. **(Previously Presented)** A process for the production of an aqueous sol containing silica-based particles which comprises the sequential steps of:
(a) acidifying an aqueous silicate solution to a pH of from 1 to 4 to form an acid sol;
(b) alkalising in a first alkalisation step the acid sol, while keeping an $SiO_2$ content within the range of from 4.5 to 8% by weight, to form an alkalised sol having a pH of at least 7;
(c) allowing particle growth of the alkalised sol for at least 10 minutes; and
(d) alkalizing in a second alkalization step the obtained sol to a pH of at least 10.0 by adding alkali selected from the group consisting of lithium hydroxide, sodium hydroxide or potassium hydroxide; an aqueous silicate solution, or a mixture thereof.

2 – 25. **Cancelled.**

26. **(Previously Presented)** The process according to claim 1, wherein the process further comprises:
(e) concentrating the alkalised sol obtained according to (b).

27. **(Previously Presented)** The process according to claim 1, wherein the process further comprises:
(e) concentrating the alkalised sol subjected to particle growth obtained according to (c).

28. **(Previously Presented)** The process according to claim 1, wherein the process further comprises:
(e) concentrating the alkalised sol obtained according to (d).

29. **(Previously Presented)** The process according to claim 1, wherein the aqueous sol obtained in the process has a specific surface area of at least 90 $m^2/g$ aqueous sol.

30. **(Previously Presented)** The process according to claim 26, wherein the aqueous sol obtained in the process has a specific surface area of at least 95 $m^2/g$ aqueous sol.

31. **(Previously Presented)** The process according to claim 1, wherein the alkalisation according to (b) and (d) is carried out by means of an aqueous silicate solution.

32. **(Previously Presented)** The process according to claim 1, wherein the particle growth according to (c) is carried out at a temperature within the range of from 35 to 95°C.

33. **(Previously Presented)** The process according to claim 1, wherein the alkalisation according to (d) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 15:1 to 30:1 and a pH of at least 10.6.

34. **(Previously Presented)** The process according to claim 1, wherein the process further comprises addition of an aluminium-containing compound, a boron-containing compound or a mixture thereof.

35. **(Previously Presented)** The process according to claim 1, wherein the silica-based particles obtained in the process have a specific surface area of at least 550 $m^2/g$ $SiO_2$.

36. **(Withdrawn)** An aqueous sol containing silica-based particles obtained by a process which comprises:

(a) acidifying an aqueous silicate solution to a pH of from 1 to 4 to form an acid sol;
(b) alkalising the acid sol at an $SiO_2$ content within the range of from 4.5 to 8% by weight to form an alkalised sol having a pH of at least 7;
(c) allowing particle growth of the alkalised sol for at least 10 minutes; and
(d) alkalising the obtained sol to a pH of at least 10.0.

37. **(Withdrawn)** The aqueous sol according to claim 36, wherein the process further comprises:
(e) concentrating the sol obtained according to (c).

38. **(Withdrawn)** The aqueous sol according to claim 36, wherein the process further comprises:
(e) concentrating the sol obtained according to (d).

39. **(Withdrawn)** The aqueous sol according to claim 37, wherein it has a specific surface area of at least 95 $m^2/g$ aqueous sol.

40. **(Withdrawn)** The aqueous sol according to claim 36, wherein the aqueous sol has a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 15:1 to 30:1 and a pH of at least 10.6.

41. **(Withdrawn)** The aqueous sol according to claim 36, wherein the sol comprises an aluminum-containing compound, a boron-containing compound or a mixture thereof.

42. **(Withdrawn)** The aqueous sol according to claim 36, wherein the silica-based particles have a specific surface area of at least 550 $m^2/g$ $SiO_2$.

43. **(Previously Presented)** A process for the production of an aqueous sol containing silica-based particles which comprises the sequential steps of:

(a) acidifying an aqueous silicate solution to a pH of from 1 to 4 to form an acid sol;
(b) alkalising in a first alkalisation step the acid sol, while keeping an $SiO_2$ content within the range of from 4.5 to 8% by weight, to form an alkalised sol;
(c) heat-treating the alkalised sol at a temperature of at least 30°C; and
(d) alkalising in a second alkalization step the heat-treated sol to a pH of at least 10.0 by adding alkali selected from the group consisting of lithium hydroxide, sodium hydroxide, or potassium hydroxide; an aqueous silicate solution, or a mixture thereof.

44. **(Previously Presented)** The process according to claim 43, wherein the process further comprises:
(e) concentrating the alkalised sol obtained according to step (b).

45. **(Previously Presented)** The process according to claim 43, wherein the process further comprises:
(e) concentrating the alkalised sol obtained according to step (c).

46. **(Previously Presented)** The process according to claim 43, wherein the process further comprises:
(e) concentrating the alkalised sol obtained according to step (d).

47. **(Previously Presented)** The process according to claim 43, wherein the aqueous sol obtained in the process has a specific surface area of at least 90 $m^2/g$ aqueous sol.

48. **(Previously Presented)** The process according to claim 43, wherein the aqueous sol obtained in the process has a specific surface area of at least 95 $m^2/g$ aqueous sol.

49. **(Previously Presented)** The process according to claim 43, wherein the alkalisation according to (b) and (d) is carried out by means of an aqueous silicate solution.

50. **(Previously Presented)** The process according to claim 43, wherein the heat-treatment according to (c) is carried out for 20 to 240 minutes.

51. **(Previously Presented)** The process according to claim 43, wherein the alkalisation according to (d) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 15:1 to 30:1 and a pH of at least 10.6.

52. **(Previously Presented)** The process according to claim 43, wherein the process further comprises addition of an aluminum-containing compound, a boron-containing compound or a mixture thereof.

53. **(Previously Presented)** The process according to claim 43, wherein the silica-based particles obtained in the process have a specific surface area of at least 550 $m^2/g$ $SiO_2$.

54. **(Withdrawn)** An aqueous sol containing silica-based particles obtained by a process comprising:
(a) acidifying an aqueous silicate solution to a pH of from 1 to 4 to form an acid sol;
(b) alkalising the acid sol at an $SiO_2$ content within the range of from 4.5 to 8% by weight to form an alkalised sol;
(c) heat-treating the alkalised sol at a temperature of at least 30°C; and
(d) alkalising the heat-treated sol to a pH of at least 10.0.

55. **(Withdrawn)** The aqueous sol according to claim 54, wherein the process further comprises:
(e) concentrating the sol obtained according to (c).

56. **(Withdrawn)** The aqueous sol according to claim 54, wherein the process further comprises:
(e) concentrating the sol obtained according to (d).

57. **(Withdrawn)** The aqueous sol according to claim 54, wherein it has a specific surface area of at least 95 $m^2/g$ aqueous sol.

58. **(Withdrawn)** The aqueous sol according to claim 54, wherein it has a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 15:1 to 30:1 and a pH of at least 10.6.

59. **(Withdrawn)** The aqueous sol according to claim 54, whereln it comprises an aluminum-containing compound, a boron-containing compound or a mixture thereof.

60. **(Withdrawn)** The aqueous sol according to claim 54, wherein the silica-based particles have a specific surface area of at least 550 $m^2/g$ $SiO_2$.

61. **(Previously Presented)** A process for the production of an aqueous sol containing silica-based particles which comprises:
(a) acidifying an aqueous silicate solution to a pH of from 1 to 4 to form an acid sol;
(b) alkalising in a first alkalisation step the acid sol, while keeping an $SiO_2$ content within the range of from 4.5 to 8% by weight, to form an alkalised sol;
(c) heat-treating the alkalised sol obtained according to (b) at a temperature within the range of from 35 to 95°C for 20 to 240 minutes;
(d) alkalizing in a second alkalization step the heat-treated sol obtained according to (c) to a pH of at least 10.0 and a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 15:1 to 30:1 by adding alkali, an aqueous silicate solution, or a mixture thereof;
(e) concentrating the sol obtained according to (c) or (d); and

(f) providing an aqueous sol which has a specific surface area of at least 95 $m^2/g$ aqueous sol and contains silica-based particles which have a specific surface area of at least 550 $m^2/g$ $SiO_2$.

62. **(Previously Presented)** The process according to claim 61, wherein the alkalisation according to step (b) and step (d) is carried out by means of an aqueous silicate solution.

63. **(Previously Presented)** The process according to claim 61, wherein the alkalisation according to (d) produces a pH of at least 10.6.

64. **(Withdrawn)** An aqueous sol containing silica-based particles obtained by a process which comprises:
(a) acidifying an aqueous silicate solution to a pH of from 1 to 4 to form an acid sol;
(b) alkalising the acid sol at an $SiO_2$ content within the range of from 4.5 to 8% by weight to form an alkalised sol;
(c) heat-treating the alkalised sol at a temperature within the range of from 35 to 95°C for 20 to 240 minutes;
(d) alkalising the heat-treated sol to a pH of at least 10.0 and a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 15:1 to 30:1;
(e) concentrating the sol obtained according to step (c) or step (d); and
(f) providing an aqueous sol which has a specific surface area of at least 95 $m^2/g$ aqueous sol and contains silica-based particles which have a specific surface area of at least 550 $m^2/g$ $SiO_2$.

65. **(Withdrawn)** The aqueous sol according to claim 64, wherein it has a pH of at least 10.6.

66 - 72. **(Cancelled)**

73. **(Previously Presented)** The process according to claim 1, wherein said $SiO_2$ content is kept within the range of from 5.0 to 7.5% by weight in step (b).

74. **(Previously Presented)** The process according to claim 73, wherein the alkalization according to (d) produces a sol having an S-value within the range of 20 to 40%.

75. **(Previously Presented)** The process according to claim 1, wherein the alkalization according to (b) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 20:1 to 80:1.

76. **(Previously Presented)** The process according to claim 75, wherein the alkalization according to (b) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 30:1 to 70:1.

77. **(Previously Presented)** The process according to claim 76, wherein the alkalization according to (d) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 12:1 to 40:1.

78. **(Previously Presented)** The process according to claim 77, wherein the alkalization according to (d) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 15:1 to 30:1.

79. **(Previously Presented)** The process according to claim 78, wherein the alkalization according to (d) produces a sol having an S-value within the range of 10 to 45%.

80. **(Previously Presented)** The process according to claim 43, wherein said $SiO_2$ content is kept within the range of from 5.0 to 7.5% by weight in step (b).

81. **(Previously Presented)** The process according to claim 80, wherein the alkalization according to (d) produces a sol having an S-value within the range of 20 to 40%.

82. **(Previously Presented)** The process according to claim 43, wherein the alkalization according to (b) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 20:1 to 80:1.

83. **(Previously Presented)** The process according to claim 82, wherein the alkalization according to (b) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 30:1 to 70:1.

84. **(Previously Presented)** The process according to claim 83, wherein the alkalization according to (d) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 12:1 to 40:1.

85. **(Previously Presented)** The process according to claim 84, wherein the alkalization according to (d) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 15:1 to 30:1.

86. **(Previously Presented)** The process according to claim 85, wherein the alkalization according to (d) produces a sol having an S-value within the range of 10 to 45%.

87. **(Previously Presented)** The process according to claim 61, wherein said $SiO_2$ content is kept within the range of from 5.0 to 7.5% by weight in step (b).

88. **(Previously Presented)** The process according to claim 87, wherein the alkalization according to (d) produces a sol having an S-value within the range of 20 to 40%.

89. **(Previously Presented)** The process according to claim 61, wherein the alkalization according to (b) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 20:1 to 80:1.

90. **(Previously Presented)** The process according to claim 89, wherein the alkalization according to (b) produces a sol having a molar ratio of $SiO_2$ to $M_2O$, where M is alkali metal or ammonium, within the range of from 30:1 to 70:1.

91. **(Previously Presented)** The process according to claim 90, wherein the alkalization according to (d) produces a sol having an S-value within the range of 10 to 45%.